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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,640	06/30/2003	Arno Mechler	089442-000000US	1388
20350	7590	02/23/2006	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			WILLIAMS, DON J	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

EF

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/611,640	MECHLER, ARNO	
	<b>Examiner</b>	<b>Art Unit</b>	
	Don Williams	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

Applicant's arguments with respect to claims 18-33 have been considered and have been found persuasive; therefore, the finality of that action is withdrawn. Upon further examination another action is set forth.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-28, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al in view of Hirabayashi et al (5,920,664).

As to claim 18, Block et al disclose a detection system with a plurality of logic cards (15a-15f) that are functionally equivalent to detector units; each logic card (15a-15f) have spaced apart, opposite sides that are arranged adjacent to and in direct contact with each other; each logic card (15a-15f) have light transmitters (23a-23f and 21a-21f), light receivers (20a-20f and 22a-22f), an optical connection path terminating in first and second optical interfaces at the opposite sides, at least one optical anomaly (26, 27) along the optical connection path of the logic card (15a-15f) for coupling light from the light transmitters (23a-23f and 21a-21f) into the optical connection path and for coupling light out of the optical connection path to the light receivers (20a-20f and 22a-

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22f) and a control circuit connected to the light transmitter (75, 80) and the light receiver (70, 85), (see figure 2, column 5, lines 7-67). Block et al fail to disclose a sensor connected to the control circuit. Hirabayashi et al disclose an x-y position sensor (16-4) connected to a feedback circuit (16-5). It would have been obvious for one ordinary skill in the art to modify Block et al to include an x-y position sensor connected to a feedback circuit (15-5) as disclosed by Hirabayashi et al to improve the detection of the electrical response corresponding to the position of the monitor beam detected by the position sensor (16-4), (see figure 16, column 16, lines 36-45).

As to claim 19, the modified Block et al disclose a detection system with an optical connection path formed by a light conductor (15a-15f) and a reflecting passage (26, 27), (see figure 2, column 5, lines 1-67).

As to claim 20, the modified Block et al disclose a detection system having an optical connection path extending in a straight line with each detector unit, (see figure 2, column 5, lines 7-67).

As to claim 21, the modified Block et al disclose a detection system with one of the first and second optical interfaces having a terminal window (27, 28) transparent to the wavelength, a housing section (1, 5) transparent to the wavelength, and a terminal adapter (15a, 15f) for the connection of a connection light guide (19, 300), and a terminal adapter (15a) for the reception of a reflecting terminal element (27, 28), (see figure 2, column 5, lines 1-67, figure 4, column 8, lines 1-13).

As to claim 22, the modified Block et al disclose a detection system with one of a totally reflecting recess of the optical connection path and a partly transmitting reflecting element (27, 28), (see figure 2, column 5, lines 1-67).

As to claim 23, the modified Block et al disclose a detection system with each detector unit (15a-15f) having a single light transmitter (23a-23f and 21a-21f) for coupling light from the light transmitter (23a-23f and 21a-21f) into the optical connection path, (see figure 2, column 5, line 1-67).

As to claim 24, the modified Block et al disclose a detection system with the optical interfaces, the optical anomaly (27, 28), the light transmitter (23a-23f and 21a-21f) and the light receiver (20a-20f and 22a-22f) are arranged to optically connect the optical interfaces to each other, and each of the optical interfaces is optically connected to the light receiver (20a-20f and 22a-22f) and to the light transmitter (23a-23f and 21a-21f), (see figure 2, column 5, lines 1-67).

As to claim 25, the modified Block et al disclose a detection system wherein the light transmitter (23a-23f and 21a-21f) and the light receiver (20a-20f and 22a-22f) comprise a transceiver element.

As to claim 26, the modified Block et al disclose a detection system with each detector unit (15a-15f) having a first and second optical connection paths connecting the first and second optical interfaces, the light transmitter (23a-23f and 21a-21f) with an associated optical anomaly (27, 28) being arranged at the first optical connection path and the light receiver (20a-20f and 22a-22f) with another associated optical anomaly

being arranged at the second optical connection path, (see figure 2, column 5, lines 1-67).

As to claim 27, the modified Block et al disclose a detection system where part of the sensor (16-4) comprises a part of an optoelectronic sensor, or a part of a sensor device including an optical or electrical interface to a sensor head, (see figure 16, column 16, lines 36-45).

As to claim 28, the modified Block et al disclose a detection system with optical interfaces of adjacent detector units are provided in a congruent arrangement, (see figure 2, column 5, lines 1-5).

As to claim 30, the modified Block et al disclose a detection system with one terminal unit (15a) having a terminal reflector (27, 28) in a congruent arrangement to the optical interface and an adjacent detector unit, (see column 4, lines 15-20, figure 2, column 5, lines 40-62).

As to claim 31, the modified Block et al disclose a detection system with one terminal unit (15a) having a first and a second optical interfaces and an optical connection path connecting the first and second optical interfaces, the first and second optical interfaces being arranged congruently to the optical interfaces of an adjacent detector unit (15b-15f), (see figure 2, column 5, lines 1-40).

As to claim 32, the modified Block et al disclose a detection system with a control unit adapted to synchronize the optical bus, (see figure 4, column 7, lines 16-67).

As to claim 33, the modified Block et al disclose a detection system wherein the sensor (16-4) is not optically coupled to the optical connection path, (see figure 16, column 16, lines 36-45).

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Block et al in view of Hirabayashi et al and further in view of Vogley (6,832,014).

As to claim 29, the modified Block et al disclose a detection system with adjacent detector unit (15a-15f). The modified Block et al fail to explicitly disclose an adapter unit having an optical interface and a light guide output connected optically or optoelectronically wherein the adapter unit is congruently arranged to the optical interface of an adjacent detector unit (15a-15f). Vogley disclose feeds (34) and fiber waveguide (22) in an optical path (18, 22). It would have been obvious for one ordinary skill in the art to further modify Block et al to include feed (34) connected to fiber waveguides (11, 50) along the optical paths (18, 22) as disclosed by Vogley to improve the transmission and receiving of optical signals throughout the network without disruption of data switching by the switch, (see Abstract, column 2, lines 1-16, figure 1, column 3, lines 1-27).

### ***Conclusion***

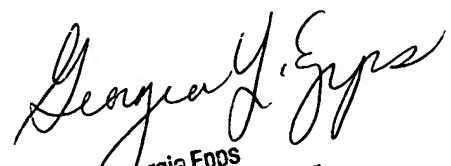
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don Williams whose telephone number is 571-272-8538. The examiner can normally be reached on 8:30a.m. to 5:30a.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).